

MSLFGLLLLTALAGQRQGTQAESNLSSKFQFSSNKEQNGVQDPQHERIITVSTNGSIHS

MLLLGLLLLTALAGQRTGTRAESNLSSKLQLSSDKEQNGVQDPRHERVVVTISGNGSIHS

10 20 30 40 50 60

PRFPHTYPRNTVLVWRLVAVEENVWIIQLTFDERFGLEDPEDDICKYDFVEVEEPSDGTIL

PKFPHTYPRNMVLVWRLVAVDENVRIQLTFDERFGLEDPEDDICKYDFVEVEEPSDGSVL

70 80 90 100 110 120

GRWCGSGTVPKGQISKGNQIRIRFVSDEYFPSEPGFCIHYNIVMPQFTEAVSPSVLPPSA

GRWCGSGTVPKGQTSKGNHIRIRFVSDEYFPSEPGFCIHYSIIMPQVTETTSPSVLPPSS

130 140 150 160 170 180

LPLDLLNNAITAFSTLEDLIRYLEPERWQLDLEDLYRPTWQLLGKAFVFGRKSRVVDLNL

LSLDLLNNAVTAFSTLEELIRYLEPDRWQVDLDSLYKPTWQLLGKAFLYGKKSKVVDLNL

190 200 210 220 230 240

LTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPSK

LKEEVKLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPRK

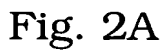
250 260 270 280 290 300

VTKKYHEVLQLRPKTGVRGLHKSLTDVALEHHEECDVCVCRGSTGG (SEQ ID NO:2)

VTKKYHEVLQLRPKTGVKGLHKSLTDVALEHHEECDVCVCRGNAGG (SEQ ID NO:43)

310 320 330 340

Fig. 1



50	-1.10	=====	I
51	-0.80	=====	t
52	-0.18	==	V
53	-0.23	==	S
54	-0.37	=====	T
55	-0.25	=====	N
56	-0.28	=====	G
57	0.22		S ==
58	-0.25	=====	I
59	0.05		H
60	0.05		S
61	-0.07	=	P
62	-0.05		R
63	-0.55	=====	F
64	0.37		P =====
65	0.40		H =====
66	0.42		T =====
67	0.23		Y ==
68	-0.08	=	P
69	-0.33	=====	R
70	-1.40	=====	N
71	-0.93	=====	T
72	-1.17	=====	V
73	-1.17	=====	L
74	-0.95	=====	V
75	-0.95	=====	W
76	0.12		R =
77	0.12		L =
78	0.45		V =====
79	0.45		A =====
80	-0.03		V
81	-0.08	=	E
82	-0.55	=====	E
83	-1.35	=====	N
84	-1.45	=====	V
85	-1.62	=====	W
86	-0.55	=====	I
87	0.25		Q =====
88	0.72		L =====
89	0.60		T =====
90	0.67		F =====
91	0.78		D =====
92	0.78		E =====
93	0.78		R =====
94	0.28		F =====
95	1.20		G =====
96	1.70		L =====
97	2.50		E =====
98	1.70		D =====
99	1.03		P =====
100	1.53		E =====
101	0.65		D =====
102	0.65		D =====
103	-0.27	=====	I

Fig. 2B

104	-0.22	==	C
105	0.45		K =====
106	-0.30	===	Y
107	0.58		D =====
108	0.58		F =====
109	1.00		V =====
110	1.30		E =====
111	1.30		V =====
112	1.55		E =====
113	0.98		E =====
114	0.18		P ==
115	-0.12	=	S
116	-0.17	==	D
117	-0.17	==	G
118	-0.73	=====	T
119	-0.83	=====	I
120	-0.53	=====	L
121	-0.80	=====	G
122	-0.80	=====	R
123	-1.37	=====	W
124	-1.05	=====	C
125	-0.88	=====	G
126	-0.88	=====	s
127	0.18		G ==
128	0.22		T ==
129	-0.02		V
130	0.28		P ===
131	0.78		G =====
132	0.78		K =====
133	0.32		Q ===
134	0.32		I ===
135	0.32		S ===
136	0.77		K =====
137	-0.03		G
138	0.47		N =====
139	0.02		Q
140	-0.27	===	I
141	0.08		R =
142	0.08		I =
143	0.88		R =====
144	0.00		F
145	0.00		V
146	0.25		S ===
147	0.25		D ===
148	0.25		E ===
149	-0.25	===	Y
150	0.13		F =
151	0.13		P =
152	-0.03		S
153	-0.38	=====	E
154	-0.97	=====	P
155	-1.35	=====	G
156	-1.32	=====	F
157	-1.20	=====	C

Fig. 2C

158	-1.28	=====	I
159	-1.20	=====	H
160	-1.12	=====	Y
161	-0.70	=====	N
162	-1.15	=====	I
163	-0.92	=====	V
164	-0.17	==	M
165	-0.03		P
166	-0.28	===	Q
167	-0.27	===	F
168	0.15		T =
169	0.27		E ===
170	-0.48	=====	A
171	-0.70	=====	V
172	-0.45	=====	S
173	-0.50	=====	P
174	-0.45	=====	S
175	-0.58	=====	V
176	-0.63	=====	L
177	-0.33	===	P
178	-0.63	=====	P
179	-0.13	=	S
180	-0.48	=====	A
181	-0.70	=====	L
182	-0.37	=====	P
183	-0.33	===	L
184	-0.12	=	D
185	-0.92	=====	L
186	-1.18	=====	L
187	-0.97	=====	N
188	-1.42	=====	N
189	-2.02	=====	A
190	-2.00	=====	I
191	-2.00	=====	t
192	-0.93	=====	A
193	-0.35	=====	F
194	-0.23	==	S
195	0.03		T
196	0.60		L =====
197	0.52		E =====
198	-0.28	===	D
199	-0.28	===	L
200	0.02		I
201	0.82		R =====
202	0.82		Y =====
203	1.03		L =====
204	1.37		E =====
205	0.57		P =====
206	1.07		E =====
207	0.27		R ===
208	0.27		w ===
209	0.93		Q =====
210	0.60		L =====
211	0.52		D =====
212	0.52		L =====

Fig. 2D

213	0.82		E =====
214	0.25		D ===
215	-0.42	=====	L
216	-0.08	=	Y
217	0.00		R
218	-0.80	=====	P
219	-0.80	=====	T
220	-0.23	==	w
221	-0.15	=	Q
222	-0.60	=====	L
223	-0.55	=====	L
224	-0.67	=====	G
225	-0.67	=====	K
226	-0.67	=====	A
227	-0.08	=	F
228	0.38		V =====
229	1.13		F =====
230	1.30		G =====
231	1.05		R =====
232	1.05		K =====
233	0.25		S ===
234	0.23		R ==
235	-0.57	=====	V
236	-0.62	=====	V
237	-0.43	=====	D
238	-0.43	=====	L
239	0.37		N =====
240	0.08		L =
241	0.88		L =====
242	0.88		T =====
243	0.57		E =====
244	0.12		E =
245	-0.55	=====	V
246	-0.37	=====	R
247	-0.87	=====	L
248	-0.07	=	Y
249	0.35		S =====
250	-0.12	=	C
251	0.10		T =
252	-0.08	=	P
253	-0.03		R
254	-0.83	=====	N
255	-0.37	=====	F
256	0.55		S =====
257	1.00		V =====
258	0.95		S =====
259	1.40		I =====
260	2.20		R =====
261	1.63		E =====
262	1.63		E =====
263	1.07		L =====
264	1.07		K =====
265	0.15		R =

Fig. 2E

266	-0.92	=====	T
267	-0.85	=====	D
268	-1.35	=====	T
269	-1.45	=====	I
270	-1.45	=====	F
271	-1.33	=====	W
272	-1.02	=====	P
273	-0.52	=====	G
274	-0.02		C
275	-0.02		L
276	0.28		L ===
277	0.58		V =====
278	0.87		K =====
279	0.20		R ==
280	-0.38	=====	C
281	-0.38	=====	G
282	-0.55	=====	G
283	-0.85	=====	N
284	-0.97	=====	C
285	-0.77	=====	A
286	-0.85	=====	C
287	-0.65	=====	C
288	0.02		L
289	0.15		H ==
290	0.27		N ===
291	0.07		C =
292	-0.02		N
293	-0.05		E
294	-0.50	=====	C
295	0.17		Q ==
296	-0.12	=	C
297	-0.02		V
298	0.73		P =====
299	1.23		S =====
300	1.20		K =====
301	0.62		V =====
302	1.37		T =====
303	1.18		K =====
304	0.38		K =====
305	-0.08	=	Y
306	-0.40	=====	H
307	0.18		E ==
308	-0.32	=====	V
309	0.43		L =====
310	0.67		Q =====
311	0.63		L =====
312	0.68		R =====
313	0.68		P =====
314	0.68		K =====
315	-0.12	=	T
316	-0.13	=	G
317	0.37		V =====
318	0.67		R =====
319	-0.13	=	G

Fig. 2F



Fig. 2G